

Title (en)

System and method for determining a position of a vehicle

Title (de)

Verfahren und System zur Ortsbestimmung eines Fahrzeuges

Title (fr)

Système et procédé de détermination de la position d'un véhicule

Publication

**EP 1707986 A3 20100929 (EN)**

Application

**EP 06111014 A 20060313**

Priority

- US 66715405 P 20050331
- US 20825505 A 20050819

Abstract (en)

[origin: EP1707986A2] A method and system for determining the position of a vehicle comprises a transmitter or transceiver for transmitting a transmission signal from a vehicle to beacons associated with the work area. Each beacon is associated with a corresponding transceiver or receiver for receiving the transmission signal. A data processor at a beacon, the vehicle or both determines an elapsed time including at least one of a first propagation duration and a second propagation duration. The first propagation duration refers to a propagation time of the transmission signal from the vehicle to the particular beacon; the second propagation duration refers to a propagation time of a return signal from the particular beacon to the vehicle. A compensator compensates for one or more of the following associated with at least one of the transmitter and the particular beacon: bias delay, noise, and measurement error. A data processor processes the elapsed times (for paths between vehicles and beacons) into corresponding position curves or temporal curves to estimate a position of a vehicle at a confluence or intersection of the position curves or temporal curves.

IPC 8 full level

**G01S 1/02** (2010.01); **G01S 5/06** (2006.01); **G01S 13/87** (2006.01)

CPC (source: EP US)

**G01S 5/0215** (2013.01 - EP US); **G01S 5/10** (2013.01 - EP US); **G01S 13/876** (2013.01 - EP US)

Citation (search report)

- [X] US 3659085 A 19720425 - POTTER BASIL E, et al
- [XI] US 5884215 A 19990316 - BIRCHLER MARK A [US], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1707986 A2 20061004**; **EP 1707986 A3 20100929**; **EP 1707986 B1 20120822**; US 2006224307 A1 20061005; US 7720598 B2 20100518

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